MEXICO AND ITS PEOPLE.

The Natural Resources of the Country Are Wonderful.

Population Is Divided Into Three Distinct Classes—Its Flora and Fauna Are Too Profuse in Variety to Be Fully Described.

[Special Mexico Letter.]

Speaking of Old Mexico, the sister republic of the United States, a famous French author said: "It is a country endowed to profusion with every gift that man can desire or envy; all the metals, from gold to lead; every sort of climate, from perpetual snow to tropical heat, and of inconceivable fertility."

The gradual increase of railroad facilities between the two countries will, no doubt, in the course of the next dec-

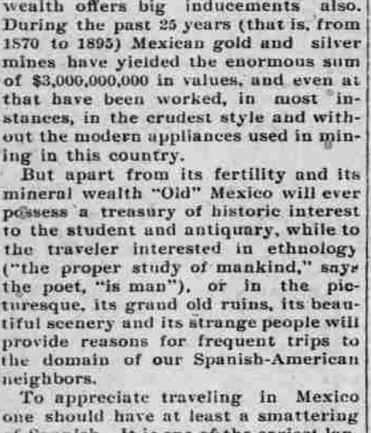
CASTLE OF CHAPULTEPEC.

ade, make Mexico better known to Americans (especially those who have the means to buy land and employ labor) than ever before. When it is remembered that the United States pays Mexico about $100,000,000 annually for sugar, coffee and fruit there can be seen good reason why the man of moderate means should turn his eyes thitherward in search of a profitable field for investment. Its mineral wealth offers big inducements also. During the past 25 years (that is, from 1870 to 1895) Mexican gold and silver mines have yielded the enormous sum of $3,000,000,000 in values, and even at that have been worked, in most instances, in the crudest style and without the modern appliances used in mining in this country.

But apart from its fertility and its mineral wealth "Old" Mexico will ever possess a treasury of historic interest to the student and antiquary, while to the traveler interested in ethnology ("the proper study of mankind," says the poet, "is man"), or in the picturesque, its grand old ruins, its beautiful scenery and its strange people will provide reasons for frequent trips to the domain of our Spanish-American neighbors.

To appreciate traveling in Mexico one should have at least a smattering of Spanish. It is one of the easiest languages to acquire, and one that will repay the learner for the effort. Not only is it the national language of Mexico, but it is also spoken by the republics of Central and South America and by many of the islanders of the West Indies as well as Cuba.

The Mexicans are a very mixed race. There are, first of all, the Creoles, or white Mexicans, the descendants of the old Spanish conquerors. They generally dress in civilized garments, are more or less educated, especially fond of fun, music and festivities. Those who own the large stock farms (who are called "rancheros") dress in the picturesque national costume which includes the silver-gray "sombrero," generally adorned with a large amount of bullion lace, silver cord and tassels. Such a hat is worth from $100 to $300 and is the pride of the high-born "senor." The trousers are cut wide from the knees downwards, the sides open and richly trimmed with gold or silver lace, sometimes also with tiny bells. Then a tight-fitting jacket, an embroidered shirt and scarlet stockings, and, attached to the shoes, immense silver spurs. During any grand "fiesta" or national holiday this



MESTIZO MOTHER AND SON.

picturesque costume is much in evidence, for the Mexicans are very patriotic, but ordinarily "American" clothes are worn. The Mexican ladies of the upper class are stylish in dress, use Parisian fashions and are noted for their beauty and grace. As a rule they are not well educated, reading and writing and a little music being considered sufficient. The white Mexicans are like the Spanish, from whom they descend, extremely courteous and affable and hospitable. Otherwise they have much aristocratic pride and caste exclusiveness, and are not very energetic.

Another Mexican race is the Mestizo, or half-breed, the result of the intermarriage of whites and Indians. It has been said of them (as of the half-breeds of other nations and other races) that they have all the vices of Indian and Mexican and none of the virtues. This is probably an exaggeration, however, for the Mestizo women are faithful wives, kind mothers, and generally industrious. The men are, as a rule, cross-grained, turbulent and indolent.

By far the larger portion of the natives of Mexico consists of Indians of unmixed blood, of whom there are at least 6,000,000 (out of an entire population of 9,000,000), divided into 30 or 40 different tribes with different languages. These Indians are of varying degrees of civilization, ranging from the fiercest savage of the north to the gentle semi-civilized, who is as much civilized as the Mestizo and much more reliable as a laborer (peon) or mechanic.

During the past ten years Mexico has progressed as she never did before. President Porfirio Diaz is a man who thoroughly understands the character of the various races over whom he rules, for he is much more of a dictator than a president, and but few old world monarchs wield more absolute power than he does. Life and property are as safe in Mexico as they are in this country, and, as was stated at the beginning of this letter, the prosperity of the republic has attracted many foreigners, who have invested largely in coffee plantations, stock ranches, fruit farms, mines, railroads and mercantile enterprises.

In a country as large as Mexico it is very difficult to describe the climate and the flora. It has been called "the Garden of America," for every kind of grain and fruit that grows in any part of this continent will be found here, as there is every kind of climate. Some provinces are more tropical than others, and in these the sugarcane and coffee are planted, and in the forests the tiger-tribe (Felide) are at home, such as the mountain lion (puma), jaugar, ocelot and wild cat. Here also are to be found the coral snake, the rattler and scorpions, scolopendra and other venomous pests innumerable. But with such drawbacks excepted, Mexico is not far short of being an earthly paradise. The birds are numerous, possess most beautiful plumage, and include many fine songsters, while everywhere grow most gorgeous flowers and every plant known to tropic or temperate zone.

Among the many strange plants which flourish in Mexico is the agave, a species of aloe, in this country called "the century plant," because it is believed that it blooms only once in 100 years. While in cold or temperate climes the agave is, indeed, very long lived, in its own country it attains maturity in ten years. It has hard, fleshy leaves of a bluish-green color, armed with sharp spines. When it attains its maturity the agave throws up a stem 30 or 40 feet in height, and from it

MEXICAN VILLAGERS.

grow small arms with yellow blossoms, which remain for several months, after which they fade and the plant dies. By piercing the stem the sap which runs is distilled into an intoxicating liquor or wine called "pulque." When this is again distilled "mescal," a very powerful and unwholesome spirit, is derived. But the agave serves more useful purposes. The thick leaves produce a kind of soap, while from the fibers the "pita" flax is obtained, which is used for weaving into cloth. Even the flower stems are used, for, being thoroughly waterproof, they serve for thatch, and the inside of the stem makes a good hone for knives and razors, etc.

One cannot think of Mexico without the cactus, of which there are many varieties, not the tiny plants one is familiar with in this country, but great weird clumps 15 to 20 feet high, such as the "tuna," which makes good feed for stock when the thorns are burned off, and the "prickly pear," from the fruit of which the natives make a delicious jelly.

In the City of Mexico, the capital of the republic, one sees a mirror of the entire country, for included in its population of nearly 400,000 people can be found specimens of all the races from Baja, Cal., to Chiapas, and of all sorts and conditions, from the simple "peon," or day laborer, clad in chip sombrero, linen, trousers and shirt to the picturesquely-attired senor. Mexico City is one of the show places of the world. It has splendid public buildings and institutions, an immense Catholic cathedral, dating from 1573, and fine streets, walks and drives, well-lighted at night in modern style, and with very good and cheap means of transit about the city and into the suburbs. One of these suburbs contains the president's state residence, the lordly castle of Chapultepec—with the military college, barracks, etc. Here President Diaz resides and is always ready to receive visitors. In the city the traveler will be interested in the national museum which contains among other curiosities the celebrated Aztec calendar stone which shows how much of astronomical science that ancient race possessed, as their division of the year corresponds very nearly to our own; also the instruments of torture used by the officers of the Holy Inquisition, and other relics of Mexico's historic past.

Those who do not care to encounter an ocean voyage can find in Old Mexico—which can be reached from New York, Chicago and New Orleans almost as quickly as California—a land of rare interest and of great scenic attractions.

JAMES IRVING CRABBE.

THE WONDERFUL ALBATROSS.

Strange Traits of a Bird That Is Little Known.

The albatross has been the theme of poets and naturalists since the first one dawned upon the sight of man. The scientist has offered many theories for the bird's long-sustained power of flight, but it remains as much of a mystery as ever. An albatross will follow in a ship's wake for days, sailing steadily along with no motion of the wings, silent and inscrutable as fate. No other motion than an occasional veer of the wings when the bird desires to turn an angle is to be observed. Despite the bird's marvelous power of sailing along, it is very hard for it to rise from the water.

The home of the albatross is in the antipodes and Auckland islands. No lighthouse rears its head here and heavy fogs and treacherous currents swirl about the place. The land is rough and mountainous in the coast, but inland marvelous flowers grow; wonderful asters, marguerites, lilies and gentians, and her millions upon millions of birds make their homes. Among the coarse herbage the pure white head of the albatross greets the eye. The body is larger than that of the swan and its expanded wings measure 17 feet from tip to tip. Its glory has departed, for while nothing can be grander than its flight over the ocean, nothing is more ludicrous than its waddle on land. Its only sign of defense is to clap its beak in a helpless manner, for it cannot use its wings.

The nest is a pile of earth like a child's sand castle and in the cup-shaped top the albatross lays one egg. During the 60 days the egg is hatching the mother does not stir from the nest, for if she did the seahawks would swoop down on the egg and destroy it. The young bird is covered with fluffy down, pure white in color and silky as floss. The nestling is fed so assiduously that it becomes immensely fat and rivals its parent in weight. It is then deserted by the parents, who wander over the ocean, sometimes encircling the globe before returning to their home.

The most remarkable thing in the history of the albatross is that during the absence of the parents the young nestling does not receive a mouthful of food. During the whole time, sometimes four months, it lives on the fat it has accumulated. In the open nest on a bleak hillside the young albatross is exposed all winter to sharp winds and the fiercest gales that ever rush across the ocean, yet at the end of its fast the young bird is lively and in good condition. The reason the parent birds go away is not known. Their desire for flight is a mystery, for it is not the same as the migration of our northern birds to the south. When the parents return they unceremoniously bundle out the nestling which has become a slaty-gray in color and set about repairing the nest. The young bird still stays around, evincing in many pretty ways its fondness for its parents, and not till next year does it take its first flight to sea, in company with its hard-hearted father and mother.—Chicago News.

MAGNETISM IN VASES.

Instances Found in Some Ancient Roman Pottery.

A curious instance of the stability of magnetism has been found in some ancient Roman pottery. Marked traces of magnetization have been frequently noticed in Etruscan vases. The obvious assumption was that the magnetization may have undergone some modification during the many centuries that have elapsed since the vases were baked. Dr. Folgheraiter has settled this question by his observations on some vases which were pieced together from scattered fragments, taken from an excavation at Arezzo. If the magnetization of the baked clay had in any way altered since the vases were broken it is clear that the different portions falling and lying around indiscriminately would have been differently affected, and when the bits were pieced together again the broken vases would have shown irregular magnetization. But they were found to be as regularly magnetized as those which have been excavated entire, the opposite poles at the mouth and base being exactly 180 degrees apart. Dr. Folgheraiter is hopeful that further excavations may lead to the discovery of potteries of the Etruscan epoch containing undisturbed vases. This, while possible, seems improbable. But then a little while ago, as Dr. Folgheraiter points out, the antecedent improbability of our being able to get any information at all as to the elements of terrestrial magnetism somewhere about the time of the Tarquins would have seemed very great, indeed.—N. Y. Times.

Lord Kelvin on the Age of the Earth.

Lord Kelvin, in an address upon the earth as an abode fitted for life, has summed up the evidence into what must be accepted as the latest dictum of science regarding this obscure point. The old idea was of a solid earth nearly 20,000,000,000 years old, but modern science makes an immense reduction in this estimate. He was able to say with confidence that the earth solidified between 20,000,000 and 30,000,000 years ago. The latest estimate of the time required for the formation of all strata since the beginning of the Cambrian rocks is 17,000,000 years. Lord Kelvin declares that the earth could not have been habitable more than 30,000,000 years.—Scientific American.

An Example.

"What's kleptomania, daddy?" asked little Rastus.

"Kleptomania," the old man explained by illustration, "is a disease dat might make a nigger steal punkins when dey was a watermelon patch in de same lot."—Indianapolis Journal.

A Blind Mathematician.

Didymus, the Alexandrian, was born blind, but, notwithstanding this defect, attained such great skill in mathematics, geometry and logic that he was reckoned one of the wonders of his age.—Philadelphia Press.

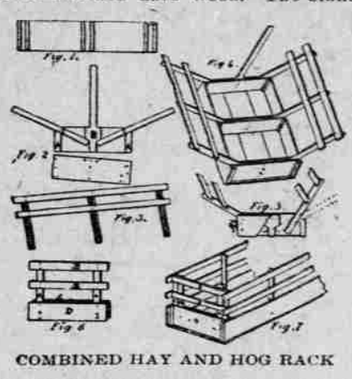
AGRICULTURAL HINTS

HAY AND HOG RACK.

A Combination Structure Which Seems Hard to Beat.

A late number of the Canadian Farmers' Advocate contained the accompanying description and illustrations of a combined hay or sheep and cattle rack by one of its correspondents:

"The accompanying figures represent a combined hay and sheep rack which is easily detachable and convenient to store away under cover. Any ordinary strong wagon box will answer if cleats are put on to hold the double end and center-boards. Fig. 1 represents the side of the box, 1½ inches thick and any desired width and length, with cleats on each end and in the center, nailed on with 3-inch wire nails to receive the cross pieces of the sides of the rack. Fig. 2 represens the front board, which is double. The lower portion of the figure is removed from its proper position to show how the sides are held in place. A is of 2x4-inch scantling. B is of 2x6-inch hard wood. The stake



COMBINED HAY AND HOG RACK

is to build the front of the load against and hold the lines while loading. These double boards are bolted or nailed with heavy wire nails, well clinched. C is of 1½x4-inch hard wood. The center and hind boards are made the same as Fig. 2 except that no stake is needed. Fig. 3 shows one of the sides held together with bolts or wire nails. A 7-foot rack requires side pieces 3 feet 7 inches long. Fig. 4 represents the hay rack complete. It is necessary to have a good, strong bottom. It is also well to have wagon rods having thumb nuts pass through the box across the center and ends to hold it firmly. A long rack should have four cross pieces. Fig. 5 shows how the sides are lifted off or placed in position. A boy can readily do this. The box is shown 13 inches deep, but 11 or 12 will answer. Fig. 6 represents the end boards for the sheep rack. Standards A are 2x4-inch scantling 3 feet 7 inches long. D is the double backboard 12 inches wide which holds the hind shelving or hurdle in place. B B are nailed to standards A on the outside. Fig. 7 shows the sheep rack. The end boards are placed in position, and the right-hand shelving is put on the left side of the box and the left on the right. The end uprights of the sides slip down between standards A of the end and the sides of the box. This holds the shelvings upright. The end boards slip up and down on C, Fig. 7. The rack is my own contrivance. I gave it a good trial last year and am well satisfied with it."

HINTS FOR STOCKMEN.

There is complaint against the work done by dehorning clippers and preference expressed for the saw. The clippers are all right if used according to directions.

The balky horse and the swearing driver are two nuisances where the horse should have the monopoly. Keep your temper and in some way get the horse to think of something else. As soon as you do he will go.

Hard roads bang up the feet of the horse, and it is a question if hard roads are not as wearing on the horse as soft roads are. But independent of that hard roads are desirable when they can be had without too much burden to the farmer.

The 1,200-pound hog—and one man claims to have one—is not desirable or profitable. We once saw a pen of ten hogs where aggregate weight was 10,000 pounds. Hogs to weigh must be kept until the second year, and that of itself is not advisable.

Secretary Wilson thinks that hog cholera can be "abolished" and will study the thing from A to Z. It has been studied already, but the more it is studied the worse it is. Feed less corn, breed from more mature stock and keep the hogs under healthful conditions are all the science there is to the subject.—Western Plowman.

Home Market the Best.

What would a farm be that did not contain a flock of hens? The eggs are considered adjuncts to the farm, and they enter into many of the household dishes. In estimating the profits from poultry the eggs and poultry consumed by the family should be given the same value as though such supplies were purchased. The "family" markets in the United States excel all others, and no farmer should sell his eggs and live on something less desirable, but enjoy the same luxuries as those who are willing to have the best in the cities. Supply the home market first.—Farm and Fireside.

Barometers on the Farm.

The farm is full of barometers, all more certain than the best almanacs ever concocted. Before the rain comes the dog is lazy and wants to sleep, the cat washes its face, and the horses are restless and easily frightened. The geese are noisy, the poultry seek their roosts, ants are in a hurry and skurry laying in supplies, spiders crowd together on the wall, toads and snails and slugs are on the garden paths and birds cry "weet, weet," the frogs croak, and peafowl become very excitable and talkative.

CULTIVATING GRASS.

No Crop Grown on the Average Farm Pays Better.

There is no part of farming at the present day so much neglected as the meadow, and there is no crop grown that pays better. The general idea of the farmer is that the meadow does not require any cultivation or care. "The meadow," he says, "is all right. I seeded this field three or five years ago; but I cannot see why I get so light a crop."

It is quite plain you have been robbing the land for three years and returning nothing. Worse than that; you have allowed the moss to creep in and smother the roots which you have robbed of their natural sustenance, without returning anything to them or driving off the moss from the root-bound grass. What kind of a corn crop would you get if you did not cultivate it? To insure a big crop of hay cultivate it. Haul, during the month of December, say from six to eight loads to the acre of barnyard manure and spread it while hauling as evenly as you can with a fork. Then as early as you can get on the meadow in March, or as soon as the frost is out and the ground dry enough to get on with a team, take a good harrow and drag it thoroughly, and then cross-harrow it. You will imagine you are going to ruin your meadow, but you are simply loosening the roots and giving them a chance; and when harvest time comes you will find you not only did not injure your meadow, but greatly increased your crop of grass, and also improved your ground. This matter of cultivating grass is not a mere "theory." It is a principle, proved to be correct by actual trial with profitable results. In 1882 Josiah Bagley, of Serena, from a six-acre meadow took 12 loads of hay, with no after-crop. The following season he manured and cultivated the same six acres substantially as outlined above. Some of his neighbors laughed at him; but about the 10th of July, 1883, he cut 19 loads of grass from these six acres, and in the last of September cut a second crop of nine loads. He says: "I am an advocate of cultivating grass."—J. E. Porter, in Prairie Farmer.

TREATMENT OF MANGE.

Recipe for a Salve Which Is Said to Produce Good Results.

Scurf or mange is sometimes difficult to cure. It is caused by a small mite that burrows in the skin, and to get rid of it the mite must be destroyed. The treatment mentioned has such a tendency, but as the application is most effective when applied locally there has been too much reliance upon the internal treatment. The sulphur internally is not harmful, but it will take too much time; the process is too slow, says Breeders' Gazette.

In the first place, the pens and sleeping quarters should be frequently disinfected with crude carbolic acid and lime. The surface affected should be treated with a salve made as follows: Four ounces of salicylic acid, the same amount of hyposulphite of sodium, eight ounces of cosmoline or lard; and if the lard is used a small amount of beeswax should be added to make the mixture firm. The cosmoline or lard should be melted over a slow fire, and while it is warm enough still to remain a liquid stir in the other ingredients slowly until they are thoroughly mixed. When cold apply to the diseased skin of the hogs every day until a cure is effected. If many hogs are to be treated the amount should be doubled or quadrupled, as the necessities may require. In stirring in the salicylic acid care should be used to keep the face away from the mixture, or the person who does the work will have a violent case of sneezing. The salve mentioned is good for man or beast where there is a violent and persistent eruption of the skin. Do not forget to disinfect the pens and sleeping quarteres of the animals. The crude carbolic acid is good, but when applied strong enough to be effective it is likely to make the animals sick.

FOR CUTTING STALKS.

A Homemade Contrivance That Does Its Work Well.

A cheap stalk cutter is made by taking a sound log, A, about 4 feet long and 18 to 24 inches in diameter. Blades of steel, B, 3 feet long and 4 inches wide, edged as in sharpening a plow, are se-

STALK CUTTER.

cured to the log as shown in the cut. The shanks that hold the blades should be set forward so that in revolving the edge will strike the ground perpendicularly. A common roller frame is put on and the tongue (C) is fastened behind a cart or wagon, and it is ready for operation. The number of blades to put on depends on the size of the log and the length pieces the stalks are to be cut into. For a log 18 inches in diameter 5 blades will suffice. The log must be heavy enough so that the weight will cut through the stalks.—G. W. Waters, in Ohio Farmer.

Our Wealth in Grass.

Mr. Scribner, of the department of agriculture, has recently collected some very interesting facts about American grasses. He says: "We have better grasses and a greater variety of them native to our soil than we can ever get from Europe." Of clovers we have no less than 60 species, all native to the country, and there is an equal number of different "blue grasses," besides 20 "grazing grasses" and a great variety of others. Yet, Mr. Scribner says, hardly more than a dozen of all these kinds of native grasses have been brought into cultivation.

BEATING THE TOWER BOUNDS.

A Quaint Old Ceremonial Performed Triennially in London.

Only once in three years does the quaint old ceremonial of the beating of the tower bounds (duly observed on Ascension day this year) take place. In the quiet, tree-planted quadrangle against the White tower a posse of yeoman warders assemble in their full uniform of scarlet, decorated with the Tudor device of the rose, shamrock and thistle united, with ruffs and rosettes, and, being joined by Lieut. Gov. Godfrey Clerk, lieutenant of the tower, they filed into the historic chapel of St. Peter and Vincula, where Anne Boleyn and Catherine Howard lie buried. Here a short service was held, and then a procession was formed, led by the chief warder, bearing his staff of office on which is mounted a silver model of the White tower, and the high constable of the Liberties of the tower. Then came the children of the garrison school—boys and girls—all armed with white peeled rods wherewith to beat the bounds. Among the escort of warders were Yeoman Jailer Sweeney, bearing the ax of state. This hale old beef-eater enjoys the distinction of being the oldest servant of her majesty in the diamond jubilee year. He entered the service in February, 1837, and so came in for duty at the proclamation, the coronation, the reception of Prince Albert, and the marriage of her majesty. Leaving the tower by the eastern drawbridge, the procession went up Tower hill and round Trinity square, and the beating of the stones was done with much merriment. One boundary stone happens to be situated on the premises of a firm of wine merchants, whose hospitable custom it is to relegate the children with buns and lemonade and the warders with stronger waters. In the early years of the eighteenth century it was provided that the children were to be rewarded with halfpenny rolls and ale, and the adults with "wine, bread, butter, sage and radisee." Subsequently the procession divided in order to beat the bounds and the outer liberties of the tower, which stretch as far as Bishopsgate street, Without and Wellclose square, where up to a year ago the Tower Liberty had its separate magisterial jurisdiction, and there the courthouse still stands.—St. James Budget.

INDIAN LANGUAGES.

Unsuccessful Attempts to Preserve Them in the Phonograph.

"Like the buffalo, the Indian language will soon be lost forever," explained a gentleman, who, under the auspices of the Smithsonian, has devoted a number of years to the study and preservation of the Indian language. "It was thought that the Indian language could be preserved by the aid of the phonograph and graphophone, and parties were sent out to many Indian tribes to have them talk into the apparatus and thus secure a record of the Indian-tongue.

"It was found, however, that but few Indians of the present day, and they were the older ones, could talk a pure tongue. More than one-half of the Indians now on the reservations, and this is the case with all of the younger Indians, converse in English. It is not good English, but it is the kind they speak, a kind of pigeon English. I had the work of securing some Cherokee talk, and in doing so talked with a dozen or more leading Cherokees.

"They admitted to me that they did not know one Cherokee who could speak pure Cherokee. They said it was with the greatest difficulty that they could get the boys and girls to speak in their native tongue at all, or to learn even the commonest words or phrases. I arranged with a half dozen Cherokees however, and secured their services to talk into the machines, and have thus got some pretty good Cherokee, but I know enough about the language myself to know that it is very imperfect Indian language.

"A few of the Sioux Indians talk pretty well, but it is a mixture. In 20 years I do not think there will be an Indian in this country who can talk his native tongue pure. As far as the Indian children are concerned, they use six English words where they use one Indian word. The machines of the day will record the language if it is talked into them, but the difficulty is to get Indians who can talk with the necessary degree of accuracy."—Washington Post.

How It Came to Be Victoria.

The primate had been told by the prince that he liked good historical English names that everyone could understand. What better name, he thought, than Queen Elizabeth's. He mildly suggested "Elizabeth." "On no account," said the prince regent. "Charlotte, after your royal mother and the child's royal aunt." "Certainly not." The duchess of Kent relieved her feelings by a flood of tears. Princess Mary kissed her and the baby cried. This spurred the mild archduke. "What name is it your royal highness' pleasure to command?" "What's her mother's name?" "Victoria," answered the duke of Kent. But his intervention was met by an irate look from the regent. The duke of York, seeing that the christening must be hastened forward if it was to be got through with at all, took on himself to say: "Alexandrina Victoria." And so the queen missed being known in history as Georgiana, a fitting name for the last of the Georgian dynasty, qu'elle resume, exprime, et termine, but less suitable for a glorious reign of 60 years than Victoria.—Contemporary Review.

A Scientific Definition.

Son—Pa, what is a whisky straight?

Father (who knows whereof)—Er—well, my boy, a large swelled head; an erroneous impression of great and sudden wealth; a disposition to fight a man twice your size; an aptness for making the world to appear lop-sided and to be revolving rapidly; any one of them may be properly called a whisky's trait.—Harlem Life.